



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,023	11/19/2003	Raanan Liebermann	03-125	8805
34704 7590 08/19/2008 BACHMAN & LAPOINTE, P.C. 900 CHAPEL STREET SUITE 1201 NEW HAVEN, CT 06510			EXAMINER NGUYEN, BINH AN DUC	
			ART UNIT 3714	PAPER NUMBER
			MAIL DATE 08/19/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/718,023

**Applicant(s)**

LIEBERMANN, RAANAN

**Examiner**

Binh-An D. Nguyen

**Art Unit**

3714

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36, 39-44 and 46-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36, 39-44 and 46-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The Amendment filed April 28, 2008 has been received. According to the Amendment, claims 1, 3, 4, 10, and 42 have been amended; and new claims 71 and 72 have been added. Currently, claims 1-36, 39-44 and 46-72 are pending in the application. Acknowledgment has been made.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-9, 14, 15, 19, 20, 22-27, 42, 43, 46-49, and 53-58 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lynt et al. (5,636,038).

Referring to claim 1 Lynt et al. teaches method for communicating visual images to a handicapped person, said method comprising the steps of: providing at least one device for physically transmitting information to said handicapped person (Figs.1, 4)(1:30-45; 1:58-2:14); providing information about said visual images to said handicapped person using said at least one device (2:29-44; 3:23-66); and said information providing step comprising delivering a physical signal representative of a key word, (e.g., *using tactile display to output Braille character* (6:7-26) or *identifying an object from data base using key word such as mailboxes, police cars, tanks, etc.*(4:29-34) or *identify a person using key word such as "Mr. Bill"* (6:10-14)), describing a portion of a visual image to said handicapped person using said at least one device (3:47-50; 6:4-26), and further transmitting at least one physical input describing dynamic element associated with said key word to a second part of the body of said handicapped person (e.g., identifying a green light signal and communicate to the handicapped person by mechanical vibration (5:35-44)). Note that, regarding the amended limitation of delivering a physical signal representative of a key word describing a portion of a visual image to a first part of said handicapped person and further transmitting at least one physical input describing a dynamic element associated with said key word to a second part of the body of said handicapped person, this limitation is inherent from Lynt et al.'s teaching of separated tactile displays for visual image and auditory display to the handicapped person visual image and auditory display (5:45-65).

Should the applicant persuasively overcome the limitation of "transmitting at least one physical input describing a dynamic element associated with said key word to a

second part of the body of said handicapped person", this limitation would also be obvious since the device of Lynt can analyze at least visual images, sounds, and speech and communicates via different tactile displays to the skin of the handicapped person. Further, it is desired to communicate as much information to the handicapped person as much as possible to provide a true sense of the surrounds or environments.

Referring to claim 42 Lynt et al. teaches a system for communicating visual images to a handicapped person, said system comprising: at least one device (Figs.1, 4)(1:30-45) for physically transmitting information about said visual image to said handicapped person, *e.g., using image identification and Braille representation (6:4-26)*; and said at least one device including means for delivering a physical signal representative of a key word to a first part of a body of said handicapped person (2:29-44; 3:47-50; 6:4-26), wherein said at least one device further comprises means for delivering at least one physical input describing a dynamic element associated with said key word to a palm of said handicapped person, *e.g., using sonar and/or radar imaging to "see" through fog to alert the person to objects ahead through the tactile representation on the tactile display (6:27-32)*. Note that, regarding the amended limitation of delivering a physical signal representative of a key word describing a portion of a visual image to a first part of said handicapped person and further transmitting at least one physical input describing a dynamic element associated with said key word to a palm of said handicapped person, this limitation is inherent from Lynt

et al.'s teaching of separated tactile displays for visual image and auditory display to the handicapped person visual image and auditory display (5:45-65).

Should the applicant persuasively overcome the limitation of "transmitting at least one physical input describing a dynamic element associated with said key word to a second part of the body of said handicapped person", this limitation would also be obvious since the device of Lynt can analyze at least visual images, sounds, and speech and communicates via different tactile displays to the skin of the handicapped person. Further, it is desired to communicate as much information to the handicapped person as much as possible to provide a true sense of the surrounds or environments.

Referring to claims 3, 27, and 58 Lynt et al. teaches delivering said key word in Braille form to a body part of said handicapped person (5:45-53; 6:15-19).

Referring to claims 4 and 43 Lynt et al. teaches transmitting at least one physical input describing a dynamic element to a palm of said handicapped person (3:36-66; 5:15-34).

Referring to claims 5-7, 46, and 47 Lynt et al. teaches transmitting a plurality of successive elements describing a motion to said palm of said handicapped person; transmitting a continuance signal to said palm of said handicapped person to indicate continuance of said motion; and wherein said continuance signal transmitting step comprises transmitting said signal in the form of at least one vibration or impact on a body part (3:36-66; 5:15-34).

Referring to claims 8, 9, 48, and 49, the limitations of delivering information about a musical background to said handicapped person; and wherein said musical background delivering information comprises transmitting at least one of long and short physical impacts to a body part of said handicapped person are inherent from Lynt et al.'s teaching of processing and delivering auditory information to the handicapped person (2:15-27; 2:50-60; 3:32-35, 47-50; 4:40-42, 53-59).

Referring to claims 14, 15, 19, and 53-55, the limitations of transmitting information about said visual images to the back of at least one finger of said handicapped person (claims 14, 53); and transmitting information about the character of a person displayed in said visual images through at least one impact to said back of said at least one finger (claims 15, 54); and transmitting information about said visual images to a front portion of at least one finger (claims 19 and 55) are inherent from Lynt et al.'s teaching of the tactile display means would be placed on surface of a portion of the individual's body and the display could be a two dimensional grid in the shape of a hand or finger tip (2:1-6; 3:62-66; 5:19-20).

Referring to claim 20 Lynt et al. teaches transmitting information about a particular group, e.g., any activity detected by the cameras of the image means (1:35-57).

Referring to claim 20 Lynt et al. teaches transmitting information about lighting to said front portion of said at least one finger (1:35-45; 2:7-14; 5:35-44).

Referring to claims 23-25 and 56 Lynt et al. teaches transmitting information about scenery, a place, activity, and different pieces of information about visual images

Art Unit: 3714

(e.g., detecting traffic lights, traffic patterns, machinery, etc) to said front portion of said at least one finger (5:35-60).

Referring to claims 26 and 57 Lynt et al. teaches transmitting information about a dialogue being spoken associated with said visual image to said handicapped person (6:10-32).

Referring to claims 71 and 72, wherein said transmitting step comprises transmitting said at least one physical input describing said dynamic element to a second part of the body which is different from said first part of the body; and wherein said delivering means delivers said physical signal to at least one of fingertips of a hand that does not include said palm and fingers that are part of the hand which has said palm, since Lynt et al. teaches using separated tactile displays for visual image and auditory display to communicate visual image and auditory display to the handicapped person (5:45-65), it would have been obvious to communicate as much information to the handicapped person as much as possible to provide a true sense of the surrounds or environments.

**Claims 2, 13, 16-18, 21, 28-32, 35, 36, 44, 52, 59-64, and 67-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynt et al. (5,636,038) in view of Hagle (3,831,296).**

Lynt et al. teaches all limitations of claims 1, 14, 15, 19, 20, and 42 above. Lynt et al. does not explicitly teach the limitations of: delivering said key word in Morse code form to said handicapped person via a body part (claims 2, 44); providing said



Art Unit: 3714

handicapped person with information about a state of reception of a system on which said visual images are displayed (claims 13, 52); dividing said fingers of a hand of said handicapped person into a first group consisting of a pointer finger and a middle finger and into a second group consisting of a ring finger and a pinky and said transmitting step comprises transmitting information about a bad character to one of said fingers of said first group and transmitting information about a good character to one of said fingers of said second group (claim 16); designating one finger of each of said groups for receiving information about a male character and designating one finger of each of said groups for receiving information about a female character (claim 17); transmitting information about an age of a character and a personality of said character to said back of said at least one finger (claim 18); transmitting information about a profession of said character to said front portion of said at least one finger (claim 21); using a thumb of said handicapped person to perform control functions (claims 28, 59); using said thumb to perform at least one of call for help, call for person, and ask questions (claim 29); using said thumb to receive information about at least one of safety alerts, general alerts, and general information (claim 30); transmitting information about at least one of female representation and cross relationships to a front portion of a pinky of said handicapped person (claims 31, 62); transmitting information about an aggression group, a neutral group, and a pleasant group to at least one finger of at least one hand of said handicapped person (claims 35, 67); said aggression group information is transmitted to a finger of a hand (claims 36, 68); said neutral group information is transmitted to a finger of a hand (claims 37, 69); said pleasant group information is

transmitted to a finger of a hand (claims 38, 70); said allowing means comprises a thumb cradle (claim 60); said allowing means comprises a thumb sleeve (claim 61); said information transmitting means comprises a pinky cradle (claim 63).

**Hagle, however, teaches** a method and system for communicating with the blind and deaf person comprises providing said handicapped person with information about a state of reception of a system on which said visual images are displayed (3:8-12); dividing said fingers of a hand of said handicapped person into a first group consisting of a pointer finger and a middle finger (Fig.3, e.g., fingers 39, 35)(3:34-41) and into a second group consisting of a ring finger and a pinky (Fig.3, e.g., fingers 36, 37)(3:24-41); using a thumb of said handicapped person to perform control functions (Figs. 2, 3; 1:40-2:4); using said thumb to perform call for person (1:28-2:12); using said thumb to receive information about general information (Figs. 2-4; 3:30-64); said allowing means comprises a thumb cradle or a thumb sleeve or a pinky cradle, i.e., gloves (Figs. 1-4; 3:15-29). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Hagle's two-way communication system for the blind and deaf person to the system for converting visual and auditory into tactile representation, as taught by Lynt et al., to come up with a communication system that provide the deaf and blind person total control thus he or she can truly experience and interact with the environment.

With respect to claims 16-18, 21, 31, 35, 36, 62, and 67-70, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed

invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In this case, the communication system of Lynt et al. and Hagle, wherein Lynt et al.'s and Hagle's teaching of the handicap person is taught that each location of the simulators represent a different function, is capable of performing the claimed functions of transmitting information about a bad character to one of said fingers of said first group and transmitting information about a good character to one of said fingers of said second group; designating one finger of each of said groups for receiving information about a male character and designating one finger of each of said groups for receiving information about a female character; transmitting information about an age of a character and a personality of said character to said back of said at least one finger; transmitting information about a profession of said character to said front portion of said at least one finger; transmitting information about at least one of female representation and cross relationships to a front portion of a pinky of said handicapped person; transmitting information about emotional state to at least one finger of at least one hand of said handicapped person; said aggression group information is transmitted to a finger of a hand; said neutral group information is transmitted to a finger of a hand; and said pleasant group information is transmitted to a finger of a hand.

Referring to claim 2 and 44, Lynt et al., as modified by Hagle, discloses delivering said key word in Morse code form to said handicapped person via a body part

to provide alternative communication form for unwritten communication is well known (1:16-20).

**Claims 10-12, 39-41, 50, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynt et al. (5,636,038) in view of Butnaru et al. (6,240,392).**

Referring to claims 10 & 50, Lynt et al. discloses the method and system according to claims 1 & 42. Lynt et al. does not explicitly disclose transmitting information about a start and an end of a commercial to said handicapped person. However, Butnaru et al. teaches a communication device and method for deaf and mute persons comprising transmitting information about a start and an end of a commercial to said handicapped person (7:36-67). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include transmitting information about a start and an end of a commercial to said handicapped person as disclosed by Butnaru et al, incorporated into Lynt et al. in order for the user to enjoy the television show by allowing the user to distinguish between the actual show and the commercials.

Referring to claims 11 & 51, Lynt et al. discloses the method and system according to claims 1 & 42. Lynt et al. does not explicitly disclose transmitting information about a start of and an end of an emergency broadcast test/test to said handicapped person. However, Butnaru et al. teaches further comprising transmitting information about a start of and an end of an emergency broadcast test/test to said handicapped person (abstract: indicator signals). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include

transmitting information about a start of and an end of a emergency broadcast test/test to said handicapped person, as disclosed by Butnaru et al., incorporated into Lynt et al.'s in order to represent dangerous or cautious situations.

Referring to claim 12, Lynt et al. discloses a method according to claim 1. Lynt et al. does not explicitly disclose storing information from a written indicia scrolling across a screen containing said visual image for play at another time. However, Butnaru et al. teaches further comprising storing information from a written indicia scrolling across a screen containing said visual image for play at another time (column 2 lines 41-44 & processor 20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include storing information from a written indicia scrolling across a screen, as disclosed by Butnaru et al., incorporated into Lynt et al.'s in order to display the symbolic representation of the speech data.

Referring to claim 39, Lynt et al. discloses a method according to claim 1. Lynt et al. does not explicitly disclose wherein said visual image is part of a television program containing sound and said handicapped person is a deafblind person and wherein said method further comprises transmitting information about dialogue being spoken by characters on said television program to said deafblind person. However, Butnaru et al. teaches wherein said visual image is part of a television program containing sound (column 1 lines 63-67) and said handicapped person is a deafblind person (column 1 lines 13-16) and wherein said method further comprises transmitting information about dialogue being spoken by characters on said television program to said deafblind person (column 7 lines 36-40).

Referring to claim 40, Lynt et al., as modified by Butnaru et al., discloses wherein said information about said dialogue is transmitted by a keypad contacting fingertips of said deafblind person and said key word is delivered to said deafblind person through a plurality of impacts on a palm of a hand of said deafblind person (Lynt et al.'s 2:29-44; 3:23-66).

Referring to claim 41, Lynt et al., as modified by Butnaru et al., discloses further comprising transmitting information about motion of said visual images to said deafblind person through a plurality of impacts on said palm (Lynt et al.'s 3:47-50; 6:4-26).

**Claims 33, 34, 65 & 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynt et al. (5,636,038) in view of Nissen (U.S. 2004/0098256).**

Referring to claims 33 & 65, Lynt et al. discloses a method according to claims 1 & 42. Lynt et al. does not explicitly disclose further comprising transmitting information about grammatical tense to at least one finger of at least one hand. However, Nissen teaches further comprising transmitting information about grammatical tense to at least one finger of at least one hand (paragraphs 0014, 0022, 0023, 0079 & 0082). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include transmitting information about grammatical tense to at least one finger of at least one hand, as disclosed by Nissen, incorporated into Lynt et al. in order to have direct communication with or between deafblind people.

Referring to claim 34, Lynt et al., as modified by Nissen, teaches further comprising said transmitting step comprises transmitting grammatical tense information to a back of a pinky of said at least one hand (paragraph 0023).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-36, 39-44 and 46-72 have been considered but are moot in view of the new ground(s) of rejection necessitated by the amendment.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh-An D. Nguyen whose telephone number is 571-272-4440. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on 571-272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BN

/Robert E Pezzuto/  
Supervisory Patent Examiner  
Art Unit 3714